

AMENDMENTS TO THE CLAIMS:

Please cancel claim 12, without prejudice and amend claim 26, as shown below.

This listing of claims will replace all prior versions and listings of claims in the
Application:

Claims 1-12 (canceled)

Claim 13 (previously presented) The process according to claim 26, wherein the substrate is cooled during the process.

Claim 14 (previously presented): The process according to claim 26, wherein at least one layer of amorphous hafnium oxide having a density between 6.4 and 8.1 gm/cm³ is formed.

Claim 15 (previously presented): The process according to claim 26, wherein at least one layer of hafnium oxide having a density lower than 8 gm/cm³ is formed.

Claim 16 (previously presented): The process according to claim 26, wherein a stack of layers is formed.

Claim 17 (previously presented): The process according to claim 16, wherein the stack also includes at least one layer formed of a material having a refractive index different from that of hafnium oxide.

Claim 18 (canceled):

Claim 19 (previously presented): Process as claimed in Claim 26, wherein a stack comprising at least one layer of another material is formed on a surface of the amorphous layer of hafnium oxide.

Claim 20 (previously presented): Process as claimed in Claim 19, wherein said another material comprises silicon oxide.

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Claim 21 (previously presented): Process as claimed in Claim 19, wherein the stack comprises alternate layers of amorphous hafnium oxide having a density less than 8 gm/cm^3 and another material.

Claim 22 (previously presented): The process as claimed in Claim 21, wherein said another material comprises silicon oxide.

Claim 23 (previously presented): A process for forming an optical component which comprises vacuum depositing on a substrate at least one layer of amorphous hafnium oxide by the process of claim 26.

Claim 24 (previously presented): The process according to claim 23, wherein the at least one layer of hafnium oxide comprises amorphous hafnium oxide having a density less than 8 gm/cm^3 .

Claim 25 (previously presented): The process according to claim 24, wherein the optical component comprises a mirror.

Claim 26 (currently amended): A process for forming a layer of hafnium oxide on a substrate which comprises forming a vapor of hafnium by reactive evaporation of metallic hafnium, and condensing without ion bombardment the vapor on the substrate under oxygen, said process comprising a plurality of deposit periods interrupted by cooling periods, each cooling period lasting for a time equivalent to one or several times the preceding deposit period, whereby ~~while maintaining the substrate at ambient temperature, to form~~ an amorphous layer of hafnium oxide is formed on said substrate.

Claim 27 (previously presented): The process according to claim 26, wherein the substrate is at about 20°C .

Claim 28 (previously presented): The process according to claim 26, wherein the process is conducted in a vacuum chamber.

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